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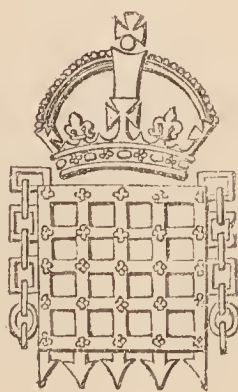
WESTMINSTER HOSPITAL
MEDICAL SCHOOL.

THE INTRODUCTORY ADDRESS
FOR THE SESSION 1870-71.

BY

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WHATEVER may be the difficulties which belong to an introductory address—and I am not disposed to underrate them—no part of these is made up of any doubt as to the precise subject upon which we have to speak. Nothing is more reasonable than that those who come fresh to the practice of any profession should desire to learn the general features of the ground they have to tread. My task therefore I take to be that of expounding in the simplest and frankest manner the duties, aims, and rewards of medicine. In such a survey, since the language of panegyric is best avoided, the plainest speaker may hope to convey something which shall serve in some measure to clear the view.

It is not to be supposed that in making choice of this or any other profession as the employment of a life, one is guided altogether by a decided personal preference, or the mere desire to satisfy a benevolent instinct. A man asks himself how far will this work suit my temperament, my love of ease, or my love of money—what interest can I get for my capital? It is almost the exception, I suppose, in these days to embrace a profession only on account of an enthusiastic love for it. It is very desirable at the outset to recognise the existence of such motives, and so to avoid the use of overstrained language. At the same time, in the

wish to be strictly practical and unimpassioned, I would not be led away into calumny. The choice of a profession, if not guided altogether by the very highest motives, is still guided by high ones, at the least such mean considerations as rapid money-making, or getting into a certain groove of society, hardly enter into the calculation. They are the weaknesses of later life. What the student mainly seeks is the work best fitted for his capacity ; satisfied as to that, he goes and does that work.

And if this be so, it becomes of the utmost importance that the sentiments which incline you towards the study of medicine should be founded on a correct conception of its scope and object. It will be my special design, therefore, to put before you not a holiday view of the subject, but one which deals at least as much with our ignorance as with our knowledge. Were you to enter this profession, led away by the loose expressions which are current in society with regard to it, were you, for instance, to suppose that the end of your labours here will be the acquisition of certain rules and formularies whereby sickness is to be cured, or that we are prepared to indoctrinate you in a series of dogmas built up out of ages of experience, you would misconceive both the powers and the objects of the medical art. It is best that such notions should be corrected at starting. If they are suffered to linger until personal observation remove them, scepticism is apt to take the place of credulity. In neither state of mind can justice be done to the subject of your study, or the present position and tendency of medicine be presented in a fair point of view.

It is natural enough, of course, that the popular belief in the medical art should have reference almost exclusively to the curative power of drugs. The obvious difficulties in the way of that creed escape the notice, or at least the

criticism, of those who would fain believe that their sufferings admit of a remedy. People submit themselves to us upon no footing of equality, they rarely bring clear and unbiassed minds to the consideration of their own ailments. Hence it is that they fail to see that the mere fact of public confidence in drugs is no argument whatever in their favour. It appears, indeed, that while systems of therapeutics have been many and various, each in its turn has had its period of approval while all those that have gone before it have fallen successively into ridicule. The confidence of one age has been called credulity by the next. A mere readiness of belief, then, is of itself no criterion of truth, since for ages the same faith has been extended to whatever system was uppermost. As long, indeed, as mankind are intolerant of suffering, so long will that sentiment find expression in some system or other.

But the art which in every age has been followed with so much docility has shown small confidence in itself. The past history of therapeutics is not that of a science working on bit by bit, missing the path now and then but always certain of the direction, it is the history of an art ever shifting and changing its ground in restless anxiety to place itself in conformity with some principle or other. Only a few years ago, perplexed by these abrupt changes and contrasting the old therapeutics with the new, one was heard to say, "Is disease now actually the same thing as my fathers saw, or can it have changed its nature so that the old modes of dealing with it no longer act in the old way?" And this voice, which sounds at first like irony, or the mere ejaculation of despair, was taken up and re-echoed. There arose out of it "The theory of the change of type in disease"—a theory which, like the others, has much to be said in its favour and much to be said against it, which can neither be proved nor disproved. However the truth

may be, it is at least ingenious to suggest that the ever-changing aspect of medical practice is explained and justified by a corresponding change in the nature of the material to be practised on. For the dignity of therapeutics it is better to assert that each age in its turn gets the medicine best suited to it rather than that men should believe that all these phases of practice alike represent nothing more than a series of rude attempts to influence the fixed course of disease by external agents.

But it is never too soon to learn that that view of medicine which reduces it to a mere system of drug-giving is essentially false and vicious. The science of medicine has enough to satisfy the highest aspirations, it assists directly in the saving of life, and contributes in many ways to the welfare of mankind, but it has no secret of healing to confer, it is not that thing of remedies, and cures, and specifics which some would make it. Reflect for one moment in the roughest way upon the nature of disease, consider of it as an expression for the wear and change of organs from long use, or from over-use, or for the misdirected energy of growth, or for the sudden contamination of the whole system by some subtle agent. Here are changes which but for the vicious teaching of the past we should hardly have supposed it within the province of drugs to touch, hardly, I say, from any *à priori* consideration, and certainly not at all from any evidence that we have of the fact, while age leaves the same traces, malignant growths increase, fevers fulfil their days just as of old.

Let this conviction be once settled in the mind, the conviction that disease has a certain history and follows certain laws, and we abandon for ever this vain search after remedies, and not only so, but the very stubbornness of disease to yield to our treatment may have its lesson. We may learn something from the mere observation of its

natural history. The circumstances under which disease originates, the course it is wont to take, the pursuits and the modes of life which tend to foster it—all these are points whose investigation must be of the highest importance, not only to the individual, but to the whole race. It may seem but cold comfort to a fever patient to learn that he has become the subject of certain phenomena which you must be content only to watch through its stages, but to trace that fever to its cause will imply more safety to the community than many specifics. It may dismay another to be told of some structural defect of his own, which is simply incurable, and which may kill him in an instant, but to forewarn such an one of the direction of his danger may be repeatedly to save his life.

It will be said, perhaps, that the same observation which leads to these results, which teaches how fever is bred, or how mental excitement affects the valves of the heart, might be brought to bear upon the action of drugs. It may be so, but a very little reflection will soon show that to measure the precise effect of medication is a problem of infinite complexity. With what show of reason will you attribute the changes in a patient's state from day to day to the drugs he is taking, when so many other things are being brought to bear upon him—his food, his atmosphere, his nurse, and the daily changes which the disease itself is working? Putting the case of specifics on one side, the issue in every case is obviously due, not to any one of these things, but to the joint influence of them all. We have no warrant for assuming that our acid or our vegetable bitter is the most important element in the combination, nor any means whatever of judging how the gross result would be affected if one of the factors were removed.

I do not dwell upon this point, I rather believe that of late it has been insisted upon almost too much, and

that, in waiting for actual demonstration, we may lose sight of action altogether. That strictly logical spirit which is for ever pointing out flaws in evidence, and deriding the grounds on which treatment is based, is probably less useful to the community than the temper which is apt to succeed it. The mind settles down at last to the conviction that drugs have their value, although it is difficult to estimate the exact extent of their benefit, or the precise mode of their action. Use, and use alone, seems to give to each individual a knowledge of the temper and capacity of these weapons, which can never be reached through the observation of another. It is enough to know that therapeutics, as a science, is still in its infancy—nay, it may be doubted whether that expression, as implying a certain development and giving promise of future maturity, is not altogether too hopeful with regard to it.

It is far otherwise with Pathology. The science of disease has almost arisen within our own day. It is within the memory of those yet living how, by investigating the sounds of the chest, men first found their way to a precise knowledge of the condition of the heart and lungs. Still more recently we have been supplied with means of estimating almost as nicely the state of other living organs; and not only are we able now to refer morbid changes to the operation of known laws, but we can trace the progress of those changes step by step, and even foretell the manner in which they will proceed. Death less often surprises us, and when it does so we are able often to demonstrate the precise material defect on which it depends. At the same time as positive knowledge grows, we are removing one by one the vague and metaphorical expressions of old, and putting in their place words of definite meaning. And the promise of pathology distinct and well assured is brighter than its performance. Recent investigation seems to have laid hold of

the very substance of contagion, and gives hope that we may one day control disease at its first starting-point.

True it is, no doubt, that in pathology, as elsewhere, certain phenomena are capable of a variety of explanations. That must always be so, save with the exact sciences, and Euclid, we know, does not carry us very far. And so it sometimes happens that in leaving the precision of anatomy and the merely descriptive part of science the student may be perplexed for a while at finding himself for the first time in the presence of conflicting theories. There is a mode, of course, of learning and practising the medical art just as a trade is learnt and practised. The pupil presents himself with a mind eminently receptive and obedient, he asks only to learn the rules of a craft, and enters into covenants to be received by and by into a strict society having distinct privileges with a direct money value. Such an one, by an effort, once for all forces his mind into a fixed attitude of assent. Whatever disappointment is in store for him is of a commercial rather than an intellectual kind. Where no such violence is used it must inevitably occur to the mind that in the accounts rendered to us of vital processes there is much room for conjecture and difference. It appears even that many of the accepted doctrines of physiology are based upon mere hypothesis. If, then, we want assurance as to the operations of the body in health, what agreement can be expected when there is added the disturbing influence of disease?

There is no reason whatever for disguising or shirking these difficulties. On the contrary, I think it can be shown that they have not in fact retarded the progress of practical pathology. This is not the place to discuss that question. You will be introduced, in due time, to the two pathologies; you will have to choose between them—between the theory of exudation and the theory of “the continuous development

of tissues out of one another.” Does the blood lend itself directly to the formation of new deposits, whether cancerous or tubercular or inflammatory according to some hidden tendency in the fluid itself, or do these arise directly out of the connective tissue or some modification of it? In the one view you account for new products by supposing the existence of “attractive and selective powers” outside the vessels, in the other you assume that they arise “spontaneously” from the tissue in which they are found. I make no attempt now to investigate these theories, it is enough thus to state them almost in the words of their chief exponents. Undoubtedly the objection is not altogether without force, that in turning from the mere inspection of morbid specimens to learn something of how they came about, we encounter the most violent contradictions, and are left to choose between two doctrines neither of which is more than a bare hypothesis.

I allude to this subject for no other reason than to insist that such controversies convey no real discouragement to the practical student of disease; only you must descend a little. If you will only be satisfied with what is given you—content, that is, to observe and conclude from the phenomena successively presented to your view—it matters nothing at all that you fail to convince yourself how the phenomena themselves came about. It is possible, I mean, to gather knowledge from the many aspects of disease, without being able to recognise the immutable law which each of them is designed to illustrate. In the actual progress of morbid changes, in the manner in which one diseased organ is apt to influence the rest, in the correspondence between altered function and structural change, in the order in which certain membranes are selected for attack in the several blood ailments,—in all these things we are content to learn something of the *habit* of disease, to become gra-

dually familiar with its varying moods. And that is all. It by no means follows that we apprehend these phenomena in their actual relations, or find in them all the material for general conclusions. Pathology has not reached that point yet, it can never reach it save by an extended observation of facts. Yet it is surprising how accurate and far-seeing your diagnosis may be, without your being persuaded whether Rokitansky or Virchow is in the right.

Meanwhile, in the present state of our knowledge, hasty generalisation is surely one of the pitfalls of medicine; it is so easy, by restating a fact in transcendental language or by translating its terms into a general expression, to make a show of explaining it. Our literature is not without illustrations of this bad habit. Does a certain tissue or organ become red and swollen, it is to be accounted for by the consideration that a *materies morbi* is present in the blood, which exhibits itself in this precise spot owing to some "affinity" or "attraction." Are the red discs of the blood in inflammation observed in mid stream while the white cling to the capillary walls, the reason is that there are forces of "attraction" and of "repulsion" at work between the walls and the two kinds of discs. Far better than this ready ingenuity of hypothesis seems the honest labour of more collecting, adding day by day to the vast pile of dead material without much thought as to the use which is to be made of it. But best of all, for us at least, just now, is the habit of regarding morbid changes strictly in connexion with their clinical phenomena, seeking by observation to eliminate the accidental from the essential symptoms, and so at length, by sheer force of experience, to found a knowledge of the real nature of disease, which, so far as it goes, shall be available for all future time.

It would appear, then, upon my showing, that this profession of yours possesses, in the first place, the means of inves-

tigating disease and of estimating therefrom the chances of life. But the care of its practitioners is as much for the community as for the individual, and the object of it is, above all, to ascertain the best conditions of health and to wage war with whatever is hostile to health. Yet while the physician's labour must be chiefly to ward off disease, he will by no means despise the help that drugs can give him when he has to meet it face to face. Here and there he will even encounter cases which medicine is undoubtedly competent to cure. For the most part, however, he will endeavour to persuade men how rare a thing is the cure of disease, and urge upon them the means which exist for its prevention. He will thus seek to relieve the sum of human misery by all the diseases averted by improved sanitary measures and by all those which admit of specific treatment and recovery. For the rest, for that suffering which is inevitable, he must be content to adopt those means of alleviation which have been so abundantly multiplied in our own day. Expedients like these are far less brilliant than the old weapons of fire and steel with which disease (before its supposed change of type) was wont to be annihilated. Heroic treatment has passed away. Ability is no longer measured by confidence and bold assertion is almost tantamount with imposture.

And if this, or something like this, represent the present position of the physician's art, what manner of men ought we to be who propose to practise it? Certainly modest and sincere, certainly of a plain and honest speech, using much care to avoid a cumbrous and unmeaning phraseology. If, for instance, ignorance of drug action is a thing confessed and notorious amongst ourselves, surely it is worth an effort, even the sacrifice of some profitable routine, to proclaim the fact of such ignorance with perfect frankness. If, as seems probable, the aspiration after remedies is destined for ever to

be disappointed, it is for us, by every means in our power, to discourage false hopes and the restless search for the unattainable. In such conduct, it seems to me, lies the very touchstone of dignified practice, the nicest test to distinguish between the noble exercise of our art and its detestable counterfeit.

You know, or you will soon learn, that individuals—the wise as well as the foolish—come to us, for the most part, with an amazing faith. They are in no humour to be critical concerning the operations taking place within themselves. The merest jargon will often pass with them for the voice of wisdom. Their very credulity is embarrassing. There are some, of course—or there have been some—unworthy enough to take advantage of this unequal position; ready, I mean, to assume credit where none is due, or, at least, to accept it without contradiction. There may be even those—I am not speaking of mere vulgar quackery—who, by ingenious theories of their own devising, obtain a larger share of public confidence than the precise circumstances rigidly investigated would seem to warrant. Such practitioners, it is only fair to suppose, have no intention to mislead, rather they are themselves led away. The uncertain attitude of medical practice offers a temptation for audacious guessing which to some minds, whether coupled or not with the prospect of material gain, becomes absolutely irresistible. Hence arise original views of therapeutics specially satisfied by some new medicine, systems of pathology pointing directly and in terms to the application of ice to the back or of saffron to the pit of the stomach.

I think it is here and now that you are to guard against such errors, and that the loose talking, and wild theories, and false logic which a man carries with him into practice, may be traced often to a vicious mode of learning in his student days. There is, for instance, at the very outset, a

way of getting up subjects by means of set phrases without ever realizing to the mind the facts which are thus expressed. You shall learn sentences and words out of a book or a lecture, and, by practice, acquire some skill in the use of them. You shall even be able to piece those words and sentences together in answer to questions ; but all the while the names that you adopt hardly stand for realities, and the thought of placing the facts in the light of your own judgment hardly occurs to you. You are bent upon satisfying the examiners, you leave out of sight the satisfying of your own mind.

Perhaps the system of teaching which permits this is not altogether perfect. Perhaps it is the fault of the headlong speed at which we are said to be living, and which allows us no time to be convinced of anything. There seems, indeed, so far as the system goes, a startling abruptness sometimes in our manner of conveying practical knowledge. Take, for example, the method of demonstrating organic structures. Almost before the student can recognise organs one from the other, certainly before he has attempted for himself to make out something of their structure by the use of his eyes and the help of a lens, he is introduced to the quarter-inch power of the microscope. There he sees strange things, anything, in fact, that you tell him that he sees, but with that sudden drop to infinite smallness he altogether loses his place. He is bewildered to know how these things are related to the organs he sees in the rough. What precisely a *cell* is, what might pass as a common man's synonym for *blastema*, he knows not at all. He is at the extreme end of the inquiry, the wrong end, seeing with other men's eyes and adopting other men's words.

And not only here, but in the phrases of an obsolete pathology, you burthen the memory sometimes with frightful names without adding anything to real knowledge. And so

it comes to pass, as from such training it surely must, that this unreal mode of learning impresses a habit on the mind, and the power of forming a distinct conception in regard to disease almost wholly dies away.

In this spirit you come at length, when your student-ship is over, to bandy about the phrases of practical medicine—inflammation, and congestion, and “perverted nervous energy,” and “tendency” to this that and the other. You apply disparaging adjectives to the organs and functions of the body, as “sluggish,” or “irritable,” or “depraved,” never at a loss for a word, hardly ever in possession of an adequate idea. And what is the result? One result may be that your opinions are quoted with much applause, and, in the end you may come even to believe that these epithets really describe disease. But observe, I beseech you, how such conduct is apt to become inveterate by the very impunity which attends it. These hasty judgments of yours (or such of them as admit of proof) are seldom to be tested by actual post-mortem inspection. With the confidence which only a long course of ignorance can give, you may assume you are always right because you are not discovered to be wrong. I repeat that it is *here* and *now* that you are to be fortified against this habit. Only learn what is meant by forming a diagnosis, carefully distinguish that operation from the mere christening of a symptom by some technical name, recognise how difficult it is, of what infinite variety (no two people ever suffering quite alike); note in every case how much has been overlooked, in very many how much has been misinterpreted, learn, in a word, the lessons of the post-mortem room,—how inadequate are the nice divisions and sub-divisions of books, how slight the relation between the disease you see and handle downstairs and that which forms the staple of popular pathology.

And, considering that the time is short, and that while books more than enough are always at hand, the opportunity of verifying your diagnosis is difficult to obtain away from this place, I would say, *Begin this practical work at once.* If in your first year you will devote what time you can spare to observing disease for yourself with as little aid from others as possible, you will be able presently, when you have to study it from a book, to compare your own unbiassed impressions with the prevailing systems and opinions. For there is, of course, this great evil in accepting any system of classification, that it must, in some sort, stand between us and the thing we would fain see with our own eyes. Coming as a learner to a subject like this, you find the ground already parcelled out and allotted, and the divisions, however admirable, are necessarily imperfect and provisional. Disease, in fact, accommodates itself but ill to the groupings and tables which are made for it. To the mere book-worker patients are seldom ill quite in the right way, there is sure to be something wanting to complete the picture in the book, and something present of which the book takes no account. How common it is by disposing of these to force the living patient within the printed definition. The symptoms which should appear are regarded as "latent," those which intrude are only "complications."* Against this danger

* Since it is common with students of medicine early to adopt what they conceive to be a professional phraseology, perhaps a word of caution might have been added in this place against the misuse of certain words, borrowed from ordinary language, and only fitly applied in their common grammatical sense. This word "complication," for example, which if employed at all should serve to denote the presence of certain phenomena having a distinct source of their own quite unconnected with the original disease, is often applied to any new symptom whatever, even to those

of too great servility to systems you must set your own power of independent observation. It is never too soon to begin to acquire that power. It is one fault of examinations, I suppose, that they hardly call forth this faculty. It is to your interest to see just as your book sees. You agree to postpone a serious study of disease until you are at liberty to express your own views about it.

But if it is misleading to bring preconceived notions to the study of disease, it is far worse to have such notions with reference to the mode of treating it. You will find, I think, that readiness in prescribing is not a thing which grows with experience, but the reverse. "When I was young," said a celebrated physician, "I possessed at least twenty remedies for every disease; but when advanced in age I find twenty diseases without a single remedy." At the first starting you may regard the majority of prescriptions as giving very inadequate expression to the multiform powers of the *Materia Medica*. You may be disposed to

which are admitted to be the ordinary exponents of the disease in question. When an individual with gout happens to break his leg, that accident may be called, if you will, a "complication" of his original ailment, but should he be attacked with bronchitis, that may be a complication or not. It is for us to say, in such a case, whether the bronchitis, like the fracture, is a mere accident, the result of exposure or what not—the presence of gout conferring no immunity against the effects of catching cold—or whether it has arisen directly from the disease, the poison of gout often showing itself in this way. In the latter case the bronchitis, though it may embarrass our treatment and add a new danger to the patient, is in no true sense a complication; it is a part of the disease, a phenomenon to be weighed along with the others before the diagnosis can be completed. The same remarks would apply where pericarditis is spoken of as a "complication" in acute rheumatism. Even pleurisy is often called a "complication" in true pneumonia, though it would be difficult to show that the latter ever exists without the former.

arrange your own materials with such completeness that no symptom of your patient shall by possibility escape. But soon experience teaches that there are stimulants which fail to stimulate and tonics which will not strengthen; and the conviction comes that the attempt to get rid of disease by thus combating its symptoms is utterly vain and futile.

Consider of disease, then, as a condition to be studied afresh in each individual. You cannot learn its treatment out of a book, nor cure it with a stroke of the pen. Often you may have to set your face against drugs, and with much labour and pains survey all the surroundings of your patient, seeking to interpret little signs for his benefit, unable perhaps even then to do more than suggest. This is far harder than writing prescriptions, and it is far less telling, as in the case of Naaman the leper, the very simplicity of your advice may give offence.

And if this be so, if disease is often best met by careful nursing, by attention to sanitary rules, by experiments in climate (they are nothing more), by putting in force the great principle of rest, what is to be said of the out-patients that daily flock to this place, of the thousands ill from hunger, from drink, from foul air, from exposure, who come to us with bottles to cure all that complicated misery? We may at least say this of them,—that the mere possession of drugs tends to make the poor more careless than ever of the ordinary rules of health. By our conduct in supplying them so readily, we do, in fact, encourage a belief that sanitary rules can be broken with impunity so long as the antidote is close at hand. But the education which is to mend all this can only come to these patients of ours in their turn. It must be your duty in addressing a higher class to speed forward that good time. Educate your patients not so much against vulgar quackery, which to

them is hardly dangerous, as against this blind confidence in the power of the doctor.

I am aware that all these remarks may be exhibited in a light which will make them ridiculous. It may be said that upon this showing the function of the physician is a narrow one indeed. It begins and ends with a protest of his inability to do what he is paid to do. It may be said, moreover, that to express a confidence you do not feel is often of direct benefit to the patient. It may even be said that perfect frankness might be misunderstood, that everywhere drugs are being ordered and swallowed with no very precise object, yet with much general advantage on both sides. If I have said at all what I started to say, I need not answer these objections now. Yet while it has been my purpose to exhibit the weakness rather than the strength of medicine, I would at the same time caution you against a vein of noisy scepticism, never so offensive as when aimed against the honest belief of those who have access to the same sources of information with ourselves. Many a man says, "I don't believe," when in fact he ought to say, "I don't understand." You must learn before you can criticise. But having learnt, once possessed of the material on which conclusions may be based, the fullest liberty is accorded you to follow the bent of your own mind, only leaving others to do the same.

Nor is it the least among the advantages which this profession offers that, unlike some others, it leaves the mind perfectly free and unfettered in the search after truth. We know nothing here of views propounded and enforced quite apart from the proper convictions of the speaker. We bind you by no fixed dogmas which a riper age may render irksome and intolerable. Only seek the truth. And remember this, that though the way may be rough and the prize far off, there is ever in pursuit a keenness of pleasure which is

lost in possession ; and not only so, but in preparing to exercise this profession honestly and well, you are doing what you can to secure the happiness of your own future—to realise, as age approaches and the objects of vulgar ambition fade away, the pleasures of a life spent in doing good.

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